

IN THE CLAIMS:

Please cancel claims 1-25 without prejudice or disclaimer, and substitute new claims 26-50 therefor as follows:

Claims 1-25 (Cancelled).

26. (New) A method for planning a radiocommunications network, comprising:

computing cell coverage, to indicate a region around a radio base station where a radioelectric signal radiating out from the radio base station copes with given requirements;

wherein computing cell coverage comprises:

dividing a region around said radio base station into a number of first areas;

for each first area, computing a first quantity indicative of the coverage within the first area as a function of data describing the environment within first areas along a propagation path of a radioelectric signal radiating out from said radio base station and passing through said first area;

dividing at least some of said first areas into a number of second areas; and

for at least some of said second areas, computing respective second quantities indicative of the coverage within said second areas, each second quantity being computed for the respective second area as a function of at least the first quantity computed for the first area containing said second area and of data describing the environment within said second area and within at least some further second areas within said first area and

arranged upstream said second area along a radioelectric signal propagation path passing through said second area.

27. (New) The method as claimed in claim 26, wherein each second quantity is computed for the respective second area also as a function of data describing the environment within some further second areas arranged just outside the first area containing said second area and upstream said second area along said radioelectric signal propagation path.

28. (New) The method as claimed in claim 26, wherein each second quantity is computed for the respective second area also as a function of the first quantities computed for first areas surrounding the first area containing said second area.

29. (New) The method as claimed in claim 28, wherein in the computation of a second quantity for a respective second area, the first quantities computed for the first areas surrounding the first area containing said second area are each weighted by using a respective weight which is inversely proportional to the distance between said second area and the corresponding first area.

30. (New) The method as claimed in claim 26, wherein said second quantities are computed for second areas empty of buildings.

31. (New) The method as claimed in claim 26, wherein computing a second quantity for a respective second area comprises:

arranging a number of virtual radioelectric signal sources outside the first area containing said second area; and

computing said second quantity as a function of the point strength of a radioelectric signal radiating out from at least one of said virtual radioelectric signal sources and having a propagation path passing through said second area.

32. (New) The method as claimed in claim 31, wherein the propagation path of the radioelectric signal radiating out from said virtual radioelectric signal source is the prolongation of a theoretical line linking said radio base station and said virtual radioelectric signal source.

33. (New) The method as claimed in claim 31, wherein said virtual radioelectric signal sources are arranged side by side along a line.

34. (New) The method as claimed in claim 33, wherein said virtual radioelectric signal sources are equispatially arranged side by side along said line.

35. (New) The method as claimed in claim 33, wherein said second areas have a polygonal shape, and wherein the distance between two adjacent virtual radioelectric signal sources along said line is correlated to a side of said second areas.

36. (New) The method as claimed in claim 33, wherein said line is a curved line.
37. (New) The method as claimed in claim 36, wherein said curved line is a circumference arc having center in said radio base station.
38. (New) The method as claimed in claim 37, wherein said circumference arc has radius equal to the difference between the distance between said radio base station and the center of the first area containing said second area and the distance between the center of said first area and said circumference arc.
39. (New) The method as claimed in claim 38, wherein said first areas have a square shape, and wherein the distance between the center of said first area and said circumference arc is correlated to the diagonal of said first area.
40. (New) The method as claimed in claim 37, wherein ends of said circumference arc lie on theoretical lines which link said radio base station and corners of the first area containing said second area and which correspond to minimum and maximum azimuth angles of said first area with respect to said radio base station.
41. (New) The method as claimed in claim 31, wherein the height of each virtual radioelectric signal source is substantially equal to the sum of the ground altitude with respect to the sea level and the building height within the first area containing said virtual radioelectric signal source.

42. (New) The method as claimed in claim 31, wherein said virtual radioelectric signal sources radiate a reference power.
43. (New) The method as claimed in claim 31, wherein the power radiated by said virtual radioelectric signal sources is uncorrelated with the power radiated by said radio base station.
44. (New) The method as claimed in claim 26, wherein said data describing the environment within a first area include ground altitude with respect to the sea level, average building height, percentage of the first area occupied by buildings, and vegetation typology.
45. (New) The method as claimed in claim 26, wherein said data describing the environment within a second area include ground altitude with respect to the sea level and building height with respect to the ground level.
46. (New) The method as claimed in claim 26, wherein a second quantity for a second area occupied by a building is computed as a function of second quantities computed for second areas surrounding the second area occupied by the building.
47. (New) The method as claimed in claim 46, wherein a second quantity for a second area occupied by a building is computed as a weighted average of second

quantities computed for second areas surrounding the second area occupied by the building.

48. (New) The method as claimed in claim 47, wherein said second quantities computed for second areas surrounding the second area occupied by the building are weighted by using respective weights which are inversely proportional to the squared distances between the second area occupied by the building and the second areas surrounding the second area occupied by the building.

49. (New) A processing system capable of being programmed to implement the method according to claim 26.

50. (New) Computer program modules comprising computer program code means, said computer program modules being able, when loaded in a processing system, to implement the method according to claim 26.